Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.-24. (Cancelled)

25. (New) A shed Cluster of Differentiation (sCD) fingerprint comprising: levels of five or more sCDs wherein the sCD fingerprint represents one or more disease states.

26. (New) The sCD fingerprint of claim 25 wherein the one or more disease states comprise a disease state selected from the group consisting of: infectious, neoplastic, autoimmune, metabolic, immunological, degenerative, psychological, psychiatric, iatrogenic, inflammatory, drug or toxin related, vascular traumatic, endocrine diseases and combinations thereof.

27. The sCD fingerprint of claim 25 wherein the one or more disease states comprise a disease state selected from the group consisting of: infection, Bence Jones Proteinuria, Chronis Myeloid Leukemia, Colorectal cancer, chronic renal failure, Crohn's Disease, Diabetic Nephropathy, Cardiac pathology, Infection, Liver damage, Lymphoma, Macrocytic anaemia, Prostate Cancer, Oligoclonal Banding, Pulmonary Embolism/Deep Vein Thrombosis and appendicitis.

28. (New) The sCD fingerprint of claim 25 wherein the five or more sCDs comprise sCDs selected from the group consisting of: CD14, CD25, CD31, CD44, CD50, CD54, CD62E, CD62L, CD86, CD95, CD106, CD116, CD124, CD138, CD141, CD40L, CD8, CD23, CD30, CD40 and their homologues present in mammalian or non-mammalian species, nd combinations thereof.

29.   (New) A method of generating a shed Cluster of Differentiation (sCD) fingerprint of one or more disease states, the method comprising:

measuring levels of five or more shed CDs from one or more individuals.

30.   (New) The method of claim 29 wherein sCD levels are measured in samples of one or more body fluids from an individual.

31.   (New) The method of claim 29 wherein the body fluid is serum.

32.   (New) The method of claim 29 wherein sCD levels are measured using a method selected from the group consisting of immunoassay, flow cytometry and combinations thereof.

33.   (New) The method of claim 29 wherein sCD levels are measured using a method selected from the group consisting of the following: multiplexed particle flow cytometry, chip based monoclonal antibody technology, chips comprising engineered antibodies and non-protein agents which bind to one or more sCDs.

34.   (New) The method of claim 29 wherein steps for calculating a sCD level include:

measuring a tested level of sCD, divided by an upper limit of normal (ULN) from sCD levels from healthy individuals;

performing a statistical analysis for the sCD level compared to an ULN; and

coding each sCD in a low to high scale to determine a sCD level.

35.   (New) A method for predicting the presence of one or more disease states in an individual, the method comprising:

comparing one or more sCD fingerprints generated from that individual with one or more reference sCD fingerprints to detect the presence of the one or more disease states.

36.   (New) A method for detecting the extent of the presence of one or more disease states in an individual, the method comprising:

comparing sCD fingerprints generated from that individual with one or more reference sCD fingerprints to determine the extent of the one or more disease states, the sCD fingerprints levels of five or more sCDs wherein the sCD fingerprint represents one or more disease states.

37.   (New) A method for assessing the progression of a disease state in an individual, the method comprising:

comparing an sCD fingerprint of an individual at two or more periods during the occurrence of the disease state to assess the progression of the disease state, the sCD fingerprint comprising levels of five or more sCDs wherein the sCD fingerprint represents one or more disease states.

38.   (New) A method for assessing the effect of one or more therapeutic or potentially therapeutic agents on one or more disease states in an individual; the method comprising:

comparing an sCD fingerprint of an individual at two or more different time periods to assess the effect of the one or more therapeutic or potentially therapeutic agents, the sCD fingerprint comprising levels of five or more sCDs wherein the sCD fingerprint represents one or more disease states.

39.   (New) A method for assessing the effect of one or more interventions on an individual, the method comprising:

comparing an sCD fingerprint of an individual exposed to the intervention with one or more reference sCD fingerprints to assess the effect of the one or more interventions, the sCD fingerprint comprising levels of five or more sCDs wherein the sCD fingerprint represents one or more disease states. .

40.   (New) The method according to claim 39 for assessing the effect of one or more interventions selected from the group comprising: treatment with chemotherapeutic agents, other agents, exposure to radiation and exposure to pathogens.

41.   (New) A method for sub-categorizing a sCD fingerprint profile, the method comprising:

identifying within one disease category one or more groups of sCDs wherein each group of sCDs exhibits common characteristics distinguishing it from any other group within that disease category.

42.   (New) A method according to claim 41 wherein the steps for sub-categorizing disease states comprises:

performing a cluster analysis on the sCD fingerprints having common characteristics within sCD levels; and

sorting the sCD fingerprint data collected into sub-categories within disease states.

43.   (New) A sCD database comprising a plurality of pathological and/or normal sCD fingerprint patterns.

44.   (New) A method according to claim 43 wherein generating a sCD database of one or more disease states comprises the step of measuring the sCD levels for five or more sCDs and collating the presence or absence of said sCDs.

45.   (New) A method according to claim 43 wherein a sCD fingerprint database is computer generated.

46.   (New) A sCD fingerprint database according to claim 43 wherein sCD fingerprints are supplemented with reference data, disease characteristics and clinical data for individual sCD fingerprints.

47.   (New) A method according to claim 43 wherein a sCD fingerprint database are included in software facilitating data retrieval.

48.   (New) A method according to claim 47 wherein a sCD fingerprint database is searchable by one or more of the following criteria:

sCDs; treatment agent, toxicological substance; one or more disease states; disease subcategory; and by disease stage and combinations thereof.